

Application Serial No. 09/344,863

PATENT APPLICATION
Attorney Docket No. D/990066/25/02
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JUN 24 2002
GROUP 1700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Edward L. Schlueter, Jr. et al.

Application No.: 09/344,863

Filed: June 28, 1999

Examiner: S. Hon

Art Unit: 1772

Title: POLYTHIOPHENE XEROGRAPHIC
COMPONENT COATINGSAssistant Commissioner for Patents
Washington, D.C. 20231

Sir:

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Cora M. Utley
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or Registered Representative)

(Signature)

June 27, 2002

AMENDMENT

This amendment is in response to the Office Action dated April 10, 2002, for which a response is due on or before July 10, 2002.

REMARKS

Review and reconsideration on the merits are requested.

Claims 1, 9-10, 17-19 and 21 have been rejected under 35 USC §103(a) as obvious over Mort, et al. In response, Applicants traverse the rejection.

Mort, et al. teaches various members of a xerographic machine which can contain a composition including a charge-transporting material and a dopant capable of accepting at least one electron from at least one charge-transporting moiety in the material. The charge-transporting compound can comprise oligothiophene-containing tetramers or high-order polymers. The thiophene-containing polymers are described at columns 4-7 of the reference. The reference also teaches other polymers that can be used in the charge-transporting material include inert or insulative butadiene-based elastomers (Example 3 at

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column 17). Claim 1 of the reference sets forth five polymers that can be used in the charge-transporting material for the coating composition.

Mort, et al. does not teach or suggest the claimed substrate. Specifically, Mort, et al. does not teach or suggest a substrate comprising a polymer selected from the group consisting of fluoropolymers, chloropolymers, silicone rubbers, polyarylenes, ethylene diene propene monomer, nitrile rubbers and mixtures thereof. Instead, Mort, et al. teaches that the butadiene can be used as an outer coating. Applicants submit that one of ordinary skill in the art would not have been motivated to take a material taught as used as an outer coating, modify its chemistry, and use it as a substrate layer as claimed.

Because Mort, et al. does not teach or suggest use of any of the polymers set forth in the present claims, as a substrate material, Applicants submit that the present claims are not rendered obvious in view of Mort, et al.

Accordingly, Applicants request withdrawal of the rejection of claims 1, 9-10, 17-19 and 21 under 35 USC §103(a) as obvious over Mort, et al.

Claims 4, 11-13 and 24 have been rejected under 35 USC §103(a) as obvious over Mort, et al. as applied to claims 1, 9-10, 17-19 and 21 above, and further in view of Mammino, et al. In response, Applicants traverse the rejection.

Mort, et al. has been discussed above.

Mammino, et al. teaches a single layer intermediate transfer member, wherein the layer comprises a fluorocarbon elastomer. It is clear from the teachings of Mammino, et al., that the fluorocarbon elastomer is meant as a single layer intermediate transfer member. The reference does not teach or suggest any outer coating. At column 5, the term "single layer fluorocarbon elastomer" is defined as not including a backing by a substrate. The single layer may include zones within the fluorocarbon elastomer. However, there is no teaching or suggestion of an outer coating on the fluorocarbon elastomer single layer intermediate transfer layer.

Therefore, because Mort, et al. teaches an outer coating comprising a thiophene-containing polymer or a butadiene-containing polymer, but does not teach or suggest the claimed substrate materials, and further because Mammino, et al. teaches a single layer fluorocarbon elastomer intermediate transfer member without an outer layer, one of

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ordinary skill in the art would not have been motivated to combine the references. More specifically, one of ordinary skill in the art would not have been motivated to place the thiophene-material coating of Mort, et al. onto the fluorocarbon elastomer of Mammino, et al. when there is no teaching or suggestion to make this drastic change. There would have to have been some teaching or suggestion in the references that the single layer intermediate transfer member could be modified by adding an outer layer. Instead, the entire teaching of Mammino, et al. is based on the fact that the fluorocarbon elastomer is a single layer.

In view of the above arguments, Applicants submit that the present claims are not rendered obvious in view of the cited combination. Accordingly, Applicants request withdrawal of the rejection of claims 4, 11-13 and 24 under 35 USC §103(a) as obvious over Mort, et al. as applied to claims 1, 9-10, 17-19 and 21 above, and further in view of Mammino, et al.

Claims 5-18 and 14-15 have been rejected under 35 USC §103(a) as obvious over Mort, et al. as applied to claims 1, 9, 17-19 and 21 above, and further in view of Jonas, et al. In response, Applicants traverse the rejection.

Mort, et al. has been discussed above. Applicants note that Mort, et al. does not teach or suggest the claimed substrate materials.

Jonas, et al. has been discussed in previous responses. Jonas, et al. teaches electrode substrates of glass or plastic films (e.g., polyester such as polyethylene terephthalate or polyethylene naphthalate, polycarbonate, polyacrylate, polysulphone, or polyimide).

Applicants submit that neither reference alone or in combination, teach the claimed substrate material. Both Jonas, et al. and Mort, et al. teach coatings using polythiophene. However, neither reference teaches or suggests the claimed substrate materials. Applicants point out that Mort, et al. teaches that butadiene can be used as an outer coating and not as a substrate layer (Example 3 and Claim 1).

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Because neither reference teaches or suggests the claimed substrate materials, Applicants submit that the present claims are not rendered obvious in view of the cited combination. Accordingly, Applicants request withdrawal of the rejection of claims 5-8 and 14-15 under 35 USC §103(a) as obvious over Mort, et al. as applied to claims 1, 9, 17-19 and 21 above, and further in view of Jonas, et al.

In view of the above arguments, Applicants submit that all claims should now be in condition for allowance. Early indication of allowability is respectfully requested.

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation Attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

In the event the Examiner considers personal contact advantageous to the disposition of this case, s/he is hereby authorized to call Applicant's Attorney, Annette L. Bade, at telephone number (310) 333-3682, El Segundo, California.

Respectfully submitted,



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June 24, 2002
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